



## STUDENT

## CAREERS

## A career in ear, nose, and throat surgery

This specialty sees older and young patients in a clinic setting complemented by surgical innovations

Michaela Cameron *North West London ear, nose, and throat registrar*<sup>1</sup>, Rishi Mandavia *North West London ear, nose, and throat registrar*<sup>1</sup>, Alex Yao *North West London ear, nose, and throat registrar*<sup>2</sup>, Jayesh Doshi *consultant ear, nose and throat surgeon*<sup>3</sup>

<sup>1</sup>Royal National Throat Nose Ear Hospital, London; <sup>2</sup>NHS North West Thames Hospitals; <sup>3</sup>Heart of England NHS Foundation Trust, Birmingham

An ear, nose, and throat (ENT) surgeon is a medical specialist who diagnoses and treats head and neck pathology, typically managing both medical and surgical aspects of patient illness. The specialty is also called otolaryngology; it was initially formed by combining otology and laryngology in the 20th century.<sup>1</sup> An otolaryngologist treats patients of all ages, from newborns to frail older adults. With at least nine available subspecialties, the budding surgeon has a range of options to choose from—and most areas are evolving, with technological and medical advances changing practice. This article explains what a career in ENT surgery involves and how to become an ENT surgeon.

### What does an ENT surgeon do?

ENT surgeons divide their time between outpatient clinics, theatre, and emergency on calls (10% of patients require emergency intervention). A typical week involves four 3.5 hour sessions in clinic and four 4.5 hour sessions in theatre.<sup>2,3</sup> ENT consultants and registrars are able to coordinate their on call commitments from home, provided they are within an agreed radius from the hospital.<sup>4,5</sup>

A full time consultant ENT surgeon typically works 40 hours per week.<sup>4,5</sup> Less than full time training is growing in popularity across surgical specialties, and 11.3% of UK ENT trainees were in the training scheme in 2016.<sup>6</sup> The Joint Committee for Surgical Training highlighted in a recent statement that ENT is one of the most popular surgical specialties for less than full time training among higher surgical trainees<sup>6</sup>; it is second only to general surgery.

ENT consultants have a subspecialty: otology, rhinology, laryngology, head and neck cancer, facial plastics, paediatrics, skull base, neurotology, or thyroid/parathyroid surgery. Across all these subspecialties, ENT surgeons are trained to manage both medical and surgical aspects within that area. Unlike in

other surgical specialties, only 15% of patients seen by ENT surgeons in the UK go on to have an operation.<sup>2,3</sup>

Most conditions seen in clinic are not life threatening—except head and neck cancers. Conditions treated include recurrent paediatric otitis media, dizziness, sudden deafness, and head and neck cancer. [Box 1](#) lists common conditions. Patients who are admitted to hospital usually stay for a short time with conditions such as tonsillitis or epistaxis, but longer stays can result from severe necrotising otitis externa or an acute airway emergency that may require a tracheostomy.

**Box 1: Common conditions in ENT<sup>2</sup>****Ears**

- Otitis media
- Otitis media with effusion
- Cholesteatoma
- Otitis externa
- Malignant otitis externa
- Dizziness
- Bell's palsy
- Hearing loss
- Tinnitus

**Nose**

- Epistaxis
- Rhinosinusitis
- Nasal polyps
- Nasal blockage
- Nasal fracture
- Skull base tumours

**Throat**

- Tonsillitis
- Dysphonia
- Dysphagia
- Pharyngeal pouch
- Branchial cysts
- Globus pharyngeus

**Head and neck**

- Neck lumps
- Benign and malignant salivary gland disease
- Head and neck cancers
- Thyroid gland masses

ENT surgeons are increasingly using technologies such as endoscopes, microscopes, powered instruments, and drills for diagnostic and therapeutic interventions.

**Who does an ENT surgeon work with?**

ENT surgeons work closely with people in other specialties such as speech and language therapists, audiologists, endocrinologist, oncologists, and dermatologists, as well as plastic and maxillofacial surgeons.

As a result, there is a shift towards joint specialty clinics for a multidisciplinary management approach. For instance, a voice disorder clinic would include a laryngologist collaborating with a speech and language therapist, and a sleep apnoea clinic would have joint ENT and respiratory input.

**What is the UK training pathway?**

You can apply to the specialty at two stages in your training: after foundation year 2 for the “run through” programme or after core surgical training. The run through programme is in a pilot period that will end in 2021, after which one of the pathways will be discontinued.<sup>7</sup> The run through ST1 and ST2 trainees follow a similar pathway as the core surgical trainees. The pathways merge in ST3, when core surgical trainees join the run through trainees in higher surgical training, which trains doctors to a level of an ENT generalist with an additional special interest. Higher surgical training takes a minimum of six years to complete.

Trainees should be allocated to an average of four theatre sessions and three outpatient department clinics session per week.<sup>8</sup> They are also entitled to one research or study session per week, which usually equates to a day.<sup>8</sup> A trainee may enter into a fellowship post—a time out of training to gain more specialist experience—that usually lasts one year.<sup>8</sup>

Furthermore, there are opportunities to take an academic training pathway in ENT. Academic clinical fellowships provide trainees with protected time and resources to explore their research interests and help them become future academic clinical leaders. See the article from *BMJ Careers* about academic clinical fellowships, which includes advice from a successful applicant to an ENT academic clinical fellowship.<sup>9</sup>

**How do I apply?**

Box 2 gives an overview of how to apply to ENT surgery.

**Box 2: Applying to ENT surgery: at a glance<sup>2,11</sup>**

- Length of training: six years minimum
- Run through/after core training: both
- Number of posts: 56
- Competition ratio: 2.36

**Applying after core surgical training**

The ENT ST3 application process is an annual national recruitment process.<sup>10</sup> Candidates are shortlisted for interview based on their online application and a ranking score. Your score is calculated using the ST3 person specification<sup>10</sup> and self assessment guidance,<sup>10</sup> so you can increase your overall rank by identifying which points in these documents you could satisfy before applying.

In 2018, there were 132 applications for 56 available posts in otolaryngology (competition ratio 2.36).<sup>11</sup> There were 10-12 run through posts made available nationally in addition to the pre-existing core themed posts.<sup>7</sup>

Before you apply for ENT specialty training, you must pass the Membership of the Royal College of Surgeons (ENT) exams.<sup>12</sup> MRCS (ENT) has two parts: MRCS part A (£539)<sup>13</sup> and diploma in otolaryngology-head and neck surgery (DO-HNS) part B (£977).<sup>14</sup> The former is a four hour exam of multiple choice, single best answer, and extended matching questions on basic surgical sciences and general principles of surgery. The latter is an otolaryngology-specific objective structured clinical examination (OSCE) that tests knowledge, communication, and general professional skills.

By the end of core surgical training, doctors who want to specialise in ENT surgery should be able to perform the following “bread and butter” operations confidently.<sup>10</sup>

1. Tonsillectomy
2. Insertion of grommets
3. Reduction of fractured nose
4. Direct pharyngoscopy or direct laryngoscopy
5. Nasal polypectomy.

To get the maximum ranking score, you need at least six months of ENT experience during core surgical training, as well as at least four months experience in at least two allied specialties such as plastic surgery, maxillofacial surgery, neurosurgery, upper gastrointestinal surgery, or paediatric surgery.<sup>10</sup> Also, you should close audit loops and present research at conferences. Show you are committed to teaching junior members of your

team and include this evidence of teaching in your surgical portfolio. You will present your ENT surgical logbook at interviews, so make sure it is up to date.<sup>10</sup>

## Applying after foundation programme

You can apply to the ENT run through programme via national core recruitment—an online system of application for training after foundation programmes where you can apply to as many specialties as you want.<sup>7 15</sup>

## What does the future hold for ENT surgery?

ENT surgeons are innovating and embracing technological advances to improve patients' quality of life. For example, robotic endoscopic surgery for oropharyngeal cancers is growing in popularity as it can reduce operating time.<sup>16</sup> Three dimensional imaging during surgery enables new, safer, less invasive procedures such as surgically removing skull base tumours through nasal passages without disturbing the face or skull.<sup>17</sup> Hearing implant technology continues to develop and includes bone-anchored hearing aids, middle ear implants, cochlear implants, and even brainstem implants.

## Interviews with ENT surgeons

### Jonathan Hern, consultant rhinologist and clinical lead for the otorhinolaryngology department, Frimley Park Hospital

#### *What is the best thing about ENT surgery?*

There is not a major on call commitment which makes our specialty particularly popular as it helps promote a good work-life balance.

#### *What is the worst thing about ENT surgery?*

It is competitive to get into, though the competition ratio is decreasing.

#### *What advice would you give to someone considering a career in ENT?*

Be committed to the specialty and start early when preparing towards your ST3 applications. Be methodical and be aware of the requirements expected of you well ahead of your interview.

### Anthony Owa, consultant otologist, Queens Hospital Romford

#### *What is the best thing about ENT surgery?*

It is a varied, and the endoscopic/minimally invasive surgery is also interesting. In my opinion, cochlear implant is one of the most successful neuroprostheses so far in ENT.

## *What is the worst thing about ENT surgery?*

I think it is the weight of sadness when breaking bad news to terminally ill cancer patients. Head and neck surgery is not for the faint hearted and can be an emotionally taxing specialty.

## *What advice would you give trainees?*

Keep training as broad as possible. Find a mentor to guide you.

### Useful resources

- ENT UK. The British Association of Otorhinolaryngology. <https://www.entuk.org/>
- SFO UK. Student and Foundation Doctors in Otolaryngology UK. <http://sfo.entuk.org/>

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**Figure**